



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,682	12/28/2005	Jean-Pierre Marc	0501-1152	4061
466 7590 06/30/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER KEE, FANNIE C	
			ART UNIT 3679	PAPER NUMBER
			MAIL DATE 06/30/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,682

Applicant(s)

MARC ET AL.

Examiner

Fannie Kee

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- _____ Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- _____ Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to because Figure 1 shows the pipe coupling in a locked state with the use of locking jaws in the top half and in an unlocked state with the use of crimping tabs in the bottom half. These are two different scenarios and need to be shown as two separate drawings rather than as one drawing.

3. The drawings are also objected to because Figure 2 shows a perspective view of the pipe coupling with locking jaws in the top half and with crimping tabs in the bottom half. These are two different scenarios and need to be shown as two separate drawings rather than as one drawing.

4. The drawings are also objected to because in Figure 2, reference element "21" should be underlined to show what it is referring to.

5. The drawings are also objected to because in Figure 5, the lead line for reference element "14" does not appear to be pointing at the correct element.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The abstract of the disclosure is objected to because of the:

- a. Improper use of legal phraseology - "[t]he inventive device", lines 1 and 9 and "[s]aid invention", line 11.

- b. Unclear language – “mutually interpenetratable gears”, line 4.
 - c. Purported merits (should only speak to technical disclosure of invention) – “[s]aid invention is used for locking a coupling in a systematic manner and makes it possible to unlock it without any preliminary voluntary operation”, lines 11-13.
- Correction is required. See MPEP § 608.01(b).

8. The specification is objected to because section titles are missing. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97
and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence
Listing" is required on paper if the application discloses a nucleotide or amino
acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence
Listing" is not submitted as an electronic document on compact disc).

Title headings are missing.

9. The disclosure is objected to because of the following informalities:

- d. Page 2, line 19 – replace the word "proper" with --properly--.
- e. Page 3, line 29 – delete the word "the" before the words "standard pipe".
- f. Page 4, line 31 – add the word --line-- before "III-III".
- g. Page 8, line 22 – replace "chamber 24" with --chamber 24--.

Art Unit: 3679

- h. Page 8, line 23 – replace “stop component 31” with --stop component 38--.
- i. Page 8, line 30 – replace “stop component 31” with --stop component 38--.
- j. Page 9, line 23 – replace the word “stop” with --coupling--.
- k. Page 9, line 33 – replace “nut 11” with --nut 4--.
- l. Page 11, lines 10-12 – what does the following sentence mean? “This solution is less preferred because it does not allow to clear the components of the coupling once unscrewing is completed”.

Correction is required.

Claim Objections

- 10. It is suggested to Applicant that references to the drawing element numbers be removed from the claims so that there is no confusion between the claims and the drawings. Also, applicant should remove dash marks and just indent.
- 11. Claim 1 is objected to because of the following informalities: delete the word “a” before the word “first” and before the word “second” in line 2 and replace the word “are” with --is-- in line 13.
- 12. Claim 2 is objected to because of the following informalities: replace the word “comprises” with --comprises-- in line 2.

Art Unit: 3679

13. Claim 3 is objected to because of the following informalities: replace the words "are together urged" with --are urged together-- in line 3.

14. Claim 7 is objected to because of the following informalities: add the word --the-- before the words "relative rotation" in line 6.

15. Claim 13 is objected to because of the following informalities: replace the word "an" before the words "external thread" with --the-- in line 8.

16. Claim 15 is objected to because of the following informalities: replace the word "a" before the word "spring" with --the-- in lines 2-3.

Correction is required.

Claim Rejections - 35 USC § 112

17. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "of the type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "of the type"), thereby rendering the scope of the claim(s) unascertainable.

Claim 3 recites "the two components (38, 42) are axially movable in relation to the body (18)". Applicant has recited both first and second components plus coupling and stop components. It appears that in this instance, Applicant is speaking to the coupling and stop components and not to the first and second components. Examiner is interpreting that Applicant is speaking to the coupling and stop components.

Claim 7 recites "in order to carry out relative rotation of the two components (2, 4) by means of tools". Applicant has recited both first and second components plus coupling and stop components. It appears that in this instance, Applicant is speaking to the first and second components and not to the coupling and stop components. Examiner is interpreting that Applicant is speaking to the first and second components.

Claim 11 recites "characterized by being a single unit". What is being characterized by being a single unit? It is unclear what Applicant is considering a single unit. Is Applicant talking about the first and second components along with the coupling and stop components being all one unit? What does Applicant define as "a single unit"? Examiner is interpreting that the locking device is "a single unit" if all of the elements are integral with each other.

Claim 12 recites “characterized by being entirely mounted on the second component (4)”. What does Applicant mean by “entirely mounted on the second component”? Applicant has already indicated in claim 1 from which claim 12 depends that the locking device is mounted on the second component. Is there a part of the locking device which was not mounted on the second component but would now be mounted on the second component based on this claim? It does not appear as though this claim further defines any claim limitations. Examiner is interpreting that as long as claim 1 is met, then claim 12 is also met.

Claim 14 recites “the first component (2) and the other pipe end-end (3) are standard non-modified components”. What is the “other pipe end-end”? Is Applicant referring back to the “other pipe end-portion” as Applicant has not previously recited any “other pipe end-end”? Examiner is interpreting that Applicant is referring back to the “other pipe end-portion” recited in claim 13 from which claim 14 depends.

Also, what does Applicant mean by “standard non-modified components”? What is the standard that Applicant is comparing against? What does Applicant mean by non-modified components? Examiner is interpreting that any convenient component is a standard non-modified component.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

20. Claims 1-7 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Marc et al U.S. Patent No. 5,851,035.

With regard to claim 1, Marc et al disclose a locking device for a screw coupling comprising a first (1) and a second (2) components rotatable in relation to one another during screwing, the first component (1) comprising a first thread (34) and a rotating engagement formation (37) distant from the first thread (34), the locking device being mounted on the second component (2) and comprising:

- a coupling component (3) for coupling with the engagement formation (37),
- a stop component (4) connected for common rotation with a body carried by the second component (2),
- disconnectable coupling means (6, 7, see Figure 1B) between the coupling component (3) and the stop component (4), characterized in that the coupling means (6, 7, see Figure 1B) are of the type with a ratchet allowing relative rotation in the direction of unscrewing when a predetermined elastic resistance is overcome.

With regard to claim 2, Marc et al disclose the coupling means comprising axially pointing teeth (6, 7, see Figure 1B) formed on the coupling component (3) and on the stop component (4), which are urged towards one another by a spring (5) in the direction of teeth interpenetration.

With regard to claim 3, Marc et al disclose the two components (3, 4) being axially movable in relation to the body and are together urged by the spring (5) towards a stop (shoulder of 9, see Figure 3) provided in the body for the coupling component (3).

With regard to claim 4, Marc et al disclose the coupling component (3) being drawn back against a spring (5) and comprises a stop (42) for engagement of a shoulder of the first component (1) in order to limit the axial extent by which the coupling component (3) is able to cover the engagement formation (37).

With regard to claim 5, Marc et al disclose the body is formed as a cup enclosing the stop component (4) and partially the coupling component (3).

With regard to claim 6, Marc et al disclose the stop component (4) and the coupling component (3) are mounted around a tube of the second component (2, see Figure 1A), which is internally threaded (41) for screwing with the first component (1).

With regard to claim 7, Marc et al disclose the body being fitted onto a second engagement formation (9) integral with the second component (2) and has its own engagement formation (4) which can be used in place of the second engagement formation (9) in order to carry out relative rotation of the two components (1, 2) by means of tools.

With regard to claim 11, Marc et al disclose the device being a single unit (see Figure 2).

With regard to claim 12, Marc et al disclose the device being entirely mounted on the second component.

With regard to claim 13, Marc et al disclose a pipe coupling comprising a pipe end-portion (1) provided with an external thread (34) and a nut (2) which can be screwed on the external thread and rotatably mounted on another pipe end-portion (31), characterized in that said coupling also comprises a locking device according to claim 1 for selectively locking against relative rotation the two components (1, 2) constituted by the nut and the end-portion provided with an external thread.

With regard to claim 14, Marc et al disclose the first component (1) and the other pipe end-end (31) are standard non-modified components.

With regard to claim 15, Marc et al disclose the coupling component (3) can be drawn back against a spring (5) and comprises a stop (42) for engagement of a shoulder of the first

Art Unit: 3679

component (1) in order to limit the axial extent by which the coupling component (3) is able to cover the engagement formation (37).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marc et al.

With regard to claims 8 and 9, Marc et al disclose the claimed invention but do not disclose that the body is secured onto the second component by either snap-fit or crimping. Snap-fit or crimping are methods well-known and practiced in the art for securing two elements together such that they cannot be accidentally dislodged and are more permanently attached.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used either snap-fit or crimping to secure the body to the second component because these methods are well-known and practiced in the art for securing two elements together such that they cannot be accidentally dislodged and are more permanently attached.

With regard to claim 10, Marc et al disclose the claimed invention but do not disclose that the body is produced in one piece with the second component.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have produced the body as one piece with the second component because it would prevent the body from being separated from the second component during shipping and installation and because one-piece construction, in place of separate elements fastened together, is a design consideration within the skill of the art. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965).

Conclusion

23. Kennedy, Smith, Zimmerman, Lamphear, Parimore, Jr., et al, Sloane, and Marc et al '595 are being cited to show the general mechanical state of the art and other examples of locking devices.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Dunwoody/
Primary Examiner, Art Unit 3679

/F. K./
Examiner, Art Unit 3679
June 22, 2008